

**What is Claimed is:**

1. An apparatus for processing biological materials, the apparatus comprising a plurality of stacked, rotatable platforms, each platform having a plurality of sample receiving areas located thereon, the apparatus having a first dispensing member mounted for dispensing reagent and/or a sample to a sample receiving area on a first stacked platform and a second dispensing member mounted for dispensing reagent and/or a sample to a sample receiving area on a second stacked platform, each platform being rotatable to move sequential sample receiving areas thereon into orientation with the mounted reagent dispensing member to receive reagent therefrom.
2. An apparatus as claimed in claim 1, wherein the apparatus further comprises a third dispensing member mounted for dispensing reagent and/or a sample to a sample receiving area on a third stacked platform.
3. An apparatus as claimed in claim 1, wherein each stacked platform has an associated dispensing member mounted for dispensing reagent and/or a sample to a sample receiving area on each stacked platform.
4. An apparatus as claimed in of claim 1, wherein the apparatus further comprises a removing member for removing process waste from the sample receiving area.
5. An apparatus as claimed in claim 1, wherein the apparatus is substantially contained within a releasably sealed housing.
6. An apparatus as claimed in claim 5, wherein said housing is connected to an air extraction means.
7. An apparatus as claimed in claim 1, wherein said platforms are rotatable about a common

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- central axis.
8. An apparatus as claimed in claim 1, wherein said platforms rotate in unison.
  9. An apparatus as claimed in claims 1, wherein said platforms rotate independently.
  10. An apparatus as claimed in claim 1, wherein said platforms are substantially horizontal and are stacked above one another vertically.
  11. An apparatus as claimed in claim 1, wherein each platform has one or more slots disposed from the edge of the platform to the center of the platform to facilitate the removal of the platform from the axis.
  12. An apparatus as claimed in claim 1, wherein each platform is substantially circular or octagonal in shape.
  13. An apparatus as claimed in claim 1, wherein at least one sample receiving area is angled relative to said platform in the range of 2° to 25° to allow liquid to collect at one part of sample.
  14. An apparatus as claimed in claim 1, wherein the apparatus contains from 4 to 10 platforms.
  15. An apparatus as claimed in claim 4, wherein said removing member comprises one or more tubes
  16. An apparatus as claimed in claim 15, wherein each tube is aluminium with a PTFE coated interior.

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17. An apparatus as claimed in claim 15, wherein each tube comprises a PTFE tube orientated within an aluminium tube.
18. An apparatus as claimed in claim 4, wherein said removing member can move vertically relative to the sample receiving area.
19. An apparatus as claimed in claim 15, wherein said tubes are separate and dispense different reagents.
20. An apparatus as claimed in claim 4, wherein the reagents are dispensed and/or the waste material removed by means of peristaltic pumps.
21. An apparatus as claimed in claim 5, wherein said apparatus housing has adjustable feet allowing said apparatus to be placed on surfaces that have an incline.
22. An apparatus as claimed in claim 1, wherein said samples are held in one or more holding means taken from a group consisting of a Petri dish, a slide , a slide cover slip and a culture chamber
23. An apparatus as claimed in claim 1, wherein said samples have an identification means disposed thereon.
24. An apparatus as claimed in claim 23, wherein said identification means is taken from a group consisting of a bar code, a dot code and a radio frequency.
25. An apparatus as claimed in claim 1, wherein the apparatus includes a sensor for detecting the presence of a sample and/or identifying the sample.
26. An apparatus as claimed in claim 25, wherein said sensor is taken from a group

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consisting of an optical sensor, a magnetic sensor, a laser scanner and a radio transmitter receiver.

27. An apparatus as claimed in claim 1, wherein the apparatus further comprises a sensor for detecting characteristics of the processed biological material.
28. An apparatus as claimed in claim 1, wherein the apparatus further comprises a UV light source.
29. An apparatus as claimed in claim 1, wherein the apparatus further comprises an air conditioning means.
30. An apparatus as claimed in claim 29, wherein said air conditioning means is used for drying samples.
31. An apparatus as claimed in claim 1, wherein the apparatus further comprises a turbidity monitor for assessing the turbidity of a sample.
32. An apparatus as claimed in claim 4, wherein said removing member is connected to a waste tank or a waste disposal device.
33. An apparatus as claimed in claim 1, wherein an electronic control unit/central processing unit controls said apparatus.
34. An apparatus as claimed in claim 33, wherein said electronic control unit/central processing unit is programmable.
35. An apparatus as claimed in claim 25, wherein said sensor is adapted to relay information to the unit.

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36. An apparatus as claimed in claim 33, wherein said control unit can interface with a printer and/or a computer.
37. An apparatus as claimed in claim 1, wherein said apparatus can process approximately 65 samples.
38. An apparatus as claimed in claim 1, wherein the apparatus is used for processing biological material for cytogenetic analysis.
39. An apparatus as claimed in claim 1, wherein the apparatus is used for processing surface culture cells in order to analyze the chromosomes associated with said cells.